Creative Enzymes®

lipid IVA 4-amino-4-deoxy-L-arabinosyltransferase

Cat. No. EXWM-2672

Lot. No. (See product label)

Introduction

Description Integral membrane protein present in the inner membrane of certain Gram negative endobacteria. In strains that do not produce 3-deoxy-D-manno-octulosonic acid (Kdo), the enzyme adds a single arabinose unit to the 1-phosphate moiety of the tetra-acylated lipid A precursor, lipid IVA. In the presence of a Kdo disaccharide, the enzyme primarily adds an arabinose unit to the 4-phosphate of lipid A molecules. The Salmonella typhimurium enzyme can add arabinose units to both positions.

Synonyms undecaprenyl phosphate-α-L-Ara4N transferase; 4-amino-4-deoxy-L-arabinose lipid A transferase; polymyxin resistance protein PmrK; arnT (gene name)

Product Information

Form Liquid or lyophilized powder

EC Number EC 2.4.2.43

Reaction (1) 4-amino-4-deoxy-α-L-arabinopyranosyl ditrans,octacis-undecaprenyl phosphate + α-Kdo-(2→4)-α-Kdo-(2→6)-lipid A = α-Kdo-(2→4)-α-Kdo-(2→6)-[4-P-L-Ara4N]-lipid A + ditrans,octacis-undecaprenyl phosphate; (2) 4-amino-4-deoxy-α-L-arabinopyranosyl ditrans,octacis-undecaprenyl phosphate + lipid IVA = lipid IIA + ditrans,octacis-undecaprenyl phosphate; (3) 4-amino-4-deoxy-α-L-arabinopyranosyl ditrans,octacis-undecaprenyl phosphate + α-Kdo-(2→4)-α-Kdo-(2→6)-lipid IVA = 4'-α-L-Ara4N-α-Kdo-(2→4)-α-Kdo-(2→6)-lipid IVA + ditrans,octacis-undecaprenyl phosphate

Notes This item requires custom production and lead time is between 5-9 weeks. We can custom produce according to your specifications.

Storage and Shipping Information

Storage Store it at +4 ℃ for short term. For long term storage, store it at -20 ℃~-80 ℃.